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Questions and Concerns from the West Lake Landfill Community Advisory Group Technical Committee

Comments on the Scope of Work and Objectives of the Investigation

EMSI: The Phase 1D investigation is meant to identify the extent of RIM in parts of western and southwestern Operable Unit 1 (OU-1) Area 1. Figure 1 is also titled Proposed Phase 1D Borings in Area 1.

CAG: Based on Figure 1, the testing is actually going to take place outside of the previously designated OU-1 Area 1. In fact, it appears most of the testing will take place in OU-2. Has the EPA changed the boundaries of OU-1 Area 1 to include parts of the North Quarry as illustrated in Figure 1? If yes, has the Missouri Department of Natural Resources agreed to the change in boundaries for OU-1 Area 1 as OU-1 and OU-1 operate under different permits? EMSI references the testing during Phase 1D as exclusively within OU-1 throughout the approved Work Plan. Our concern about area delineation is consistent throughout the document.

EMSI: The results will also provide information needed...for a possible isolation barrier within the southern portion of Area 1 or along the southern boundary of Area 1.

CAG: Based on maps of isolation barrier alternatives, would it be correct for EMSI to describe the possible isolation barrier as extending into the North Quarry, which is OU-2, not OU-1?

Comments on the Field Investigation and Sample Collection and Analyses

EMSI: #5) Upon completion of each Sonic borehole, a PVC pipe will be installed to maintain the borehole opening and the borehole will be downhole logged for gamma radiation.

CAG: Will the PVC decrease the detection of downhole Gamma radiation?

EMSI: #6) Based on the results of the GCPT gamma logs...will be used to evaluate whether the radionuclide occurrences are associated with Leached Barium Sulfate Residue (LBSR).

CAG: The Atomic Energy Commission (AEC) explicitly details how the radioactive wastes dumped at the West Lake Landfill in 1973 consisted of more radioactive wastes than "Leached Barium Sulfate Residue" in its 1974 decommission report on Latty Avenue.

EMSI: #6) Samples will be collected from the intervals with the highest gamma readings and/or at the discretion of the site health physicist/engineer/geologist from any intervals where visual inspection identifies potentially anomalous materials.

CAG: Clarification here is appreciated. Who is the site health physicist/engineer/geologist and who does this person work for?

EMSI: #6) Preference will be given, to the extent practical, to obtain samples from intervals bounded by the 1971 and 1975 topographic surfaces...

CAG: The landfill has been exposed to heavy rains and the elements for more than 40 years. We know there is currently radioactivity in the groundwater as a result of the USGS review, which means it is likely some of the radioactive materials are sinking closer to the groundwater. Several of the maximum gamma levels recorded in the Phase 1A GCPT report are below the 1971 Elevation level in Table 1 of the Phase 1D Investigation Work Plan. It's our concern sampling detailed in this part of the Work Plan will be missed if EMSI focuses only on the 1971-1975 range as determined by the Surdex Corporation.

EMSI: #7) Details 12 radioactive isotopes to be tested.

CAG: We recommend additional testing for Radium-223 and Thorium-227. If the EPA cannot amend the Phase 1 Investigation Work Plan to include sampling for the above mentioned radioisotopes, the CAG recommends that EPA Region 7 conduct tests for the listed isotopes in its split samples.

Reporting

EMSI: The progress of field work and laboratory analyses will be reported to EPA on a weekly basis as part of the monthly progress reports for OU-1.

CAG: Is the CAG able to obtain the monthly progress reports?

Miscellaneous Questions and Concerns

How is EPA Region 7 engaging the State of Missouri as it relates to the ongoing testing for radioactivity, especially tests conducted in OU-2, which is under the State of Missouri's jurisdiction?

Who is the U.S. Department of Energy point of contact for the West Lake Landfill?

Is EPA Region 7 concerned about the sonic core samples providing a pathway for contaminating the groundwater?

The "step-out" method failed to identify the radioactivity along the proposed isolation barrier as discovered during testing. Figure 1 of the Phase 1D Work Plan appears to show something similar to the "step-out" method and there remains a concern that the current testing, if a "clean line" is found, would not ensure there is no RIM to the south of the proposed "clean line" for the isolation barrier. It's our recommendation that the EPA compel the testing for RIM between the "neck" of the north and south quarries and the proposed "clean line" isolation barrier.

Regards,

West Lake Landfill CAG Technical Committee